From: Ex. 6 Personal Privacy (PP)

Sent: 1/6/2016 2:26:48 PM

To: Burdett, Cheryl [burdett.cheryl@epa.gov]; Davenport, Thomas [davenport.thomas@epa.gov]

Subject: Fw: Fwd: Wisconsin's Third World Country: One-third of wells in Kewaunee County unsafe for drinking water

Thank you for your support and efforts with my counties problems.....so many numbers....and so little time! Without spending one nickel of Federal money....or....State money you can begin our clean-up process with several changes in policy.....1. No spreading of liquid manure on less than 20 feet of soil, year round. 2. Limit liquid manure spreading to 3000 gallons per acre on soil between 20 feet and 50 feet to bedrock or groundwater. 3. Limit liquid manure spreading to 6000 gallons per acre on soil with over 50 feet of soil to bedrock or groundwater. 4. Install well monitoring equipment on all farms with over 500 cows. 5. Signed land contracts with new soil tests, from a third party required before these acres are included in the permit numbers. 6. Increase all set-backs to a min. of 150 feet, 25 feet is not working! Each on these would change our landscape tomorrow, what we have been doing for the last 10+ years.....IS NOT WORKING.....!

These changes would not cost us a nickel.....yet....they would today start the healing process and make a huge difference! If and when the new technologies come around and the farmers can afford this equipment, then changes could be made. What Kewaunee County does not have is......TIME.....we are in a human health event cause by pollution from excess application of manure and the runoff issues....use your powers and step in.....there is no better place in America for the U.S. EPA to make this stand.....Yakima Valley was work, Kewaunee County is a slam dunk! There are over 20,500 citizens waiting for your response, this issue is NOT about 16 farms, this county is in a Health Emergency, our water, wells and soon to be air need you......MAN-UP!

Thank You... Ex. 6 Personal Privacy (PP)

Tuesday, December 22, 2015 9:09 AM,

Ex. 6 Personal Privacy (PP)

wrote:

Sent from my iPhone

Begin forwarded message:

From: Ex. 6 Personal Privacy (PP)

Date: December 22, 2015 at 7:18:07 AM CST

To: "Laurie J. - DNR Ross" < laurie.ross@wisconsin.gov>

Cc: Dave Clausen <dclausendvm@gmail.com>, "Alan R. - GOV Colvin"

<alan.colvin@wisconsin.gov>, Senator Dave Hansen

<sen.hansen@legis.wi.gov>, Jon Mielke <jon.mielke@legis.wisconsin.gov>, Eric D90

Genrich <rep.genrich@legis.wisconsin.gov>, Senator Julie Lassa

<sen.lassa@legis.wisconsin.gov>, Senator Kathleen Vinehout

<sen.vinehout@legis.wi.gov>, Representative Chris Taylor

<rep.taylor@legis.wi.gov>, "Sen. Larson" <sen.larson@legis.wisconsin.gov>,

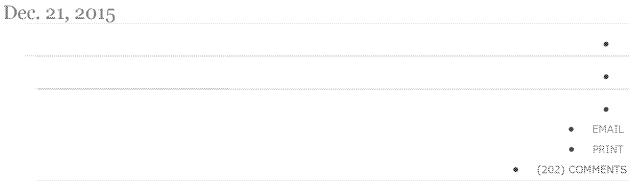
Ex. 6 Personal Privacy (PP)

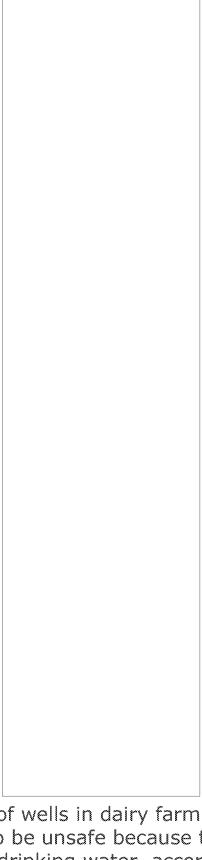
| Ex. 6 Personal Privacy (PP) Cheryl Burdett < <u>burdett.cheryl@epa.gov</u> >, Tinka |
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| <a <="" a="" href="mailto:dean@epa.gov"> |
| <a href="mailto:se</td></tr><tr><td>DATCP Brancel Sen.brancel@wisconsin.gov > , Kitty - DHS Rhoades</td></tr><tr><td>kitty.rhoades@dhs.wisconsin.gov>, "Sen.Lasee" |
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| Ex. 6 Personal Privacy (PP) 18th District Representative Evan Govke |
| <rep.goyke@legis.wi.gov>, Ex. 6 Personal Privacy (PP)</rep.goyke@legis.wi.gov> |
| Subject: Wisconsin's Third World Country: One-third of wells in Kewaunee |
| County unsafe for drinking water |
| Reply-To: Ex. 6 Personal Privacy (PP) |
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Submitted photo

Deer Run Dairy LLC near the southern end of Sleepy Hollow Road in Kewaunee County is among many large dairy farms in the county, where a recent study found one-third of the wells exceeded safety standards for drinking water.

By Lee Bergquist of the Journal Sentinel





More than one-third of wells in dairy farm-intensive Kewaunee County were found to be unsafe because they failed to meet health standards for drinking water, according to a new study.

Researchers say it's too early to blame cattle as the source of pollution.

But the findings are significant because the northeastern Wisconsin county — where cows far outnumber people — has become the center of a growing controversy in Wisconsin over manure's role in polluting ground and surface water.

The results are from the first phase of research funded by the Department of Natural Resources to study pollution problems. In Kewaunee County, cattle numbers have grown sharply over two decades, and the amount of manure exceeds the waste generated by the human population of Milwaukee.

Animal waste isn't cleaned by sewage treatment plants, however. Manure is spread on farmland as fertilizer and has long been an accepted practice of replenishing the soil for growing crops.

But manure use in Wisconsin has grown increasingly controversial, especially in areas with large-scale farms and where soil and local geologic conditions make groundwater more vulnerable to pollution. Kewaunee County has 15 large-scale dairy farms, known as CAFOs, or concentrated animal feeding operations, that have 700 or more milking cows per farm.

The county ranks among the highest in the number of CAFOs in the state, <u>according to the DNR</u>.

It also lies in a region where soil depth varies and sometimes is only a few feet above fractured bedrock where bacteria from manure and other pollutants can reach groundwater more easily.

Statewide, there are worries about the effect of manure and other nutrients that wash into streams, rivers and lakes and spur <u>algae blooms</u>. In Lake Michigan, animal waste, urban runoff and other sources are ingredients in the annual formation of a <u>dead zone</u> in Green Bay.

In October 2014, six environmental groups <u>petitioned the U.S.</u> <u>Environmental Protection Agency</u> to use its authority to investigate water contamination. Kewaunee farmers opposed the petition, but the EPA responded by saying it would work with the DNR on groundwater issues in the county.

The DNR then brought together different parties this year for discussions and formed a series of work groups aimed at reducing the risk of groundwater contamination.

Recommendations are expected to come out early next year.

The agency approved an \$80,000 research project, including the well study, that is led by researchers from the U.S. Agriculture Research Service and the University of Wisconsin-Oshkosh. The project will examine the extent and source of groundwater contamination in the county.

In August, Russ Rasmussen, the DNR's top water regulator, told the state Natural Resources Board the system of spreading manure in certain regions <u>isn't adequately protecting drinking</u> water supplies.

Last week, Rasmussen said the DNR will use input from the Kewaunee County work groups to recommend better application methods for sensitive areas. But he stressed the agency prefers a voluntary approach over regulations, which can take several years to implement.

"I do believe that those petitions made the DNR much more serious about the problem here," said Lee Luft, a member of the Kewaunee County Board and chairman of a newly formed county groundwater committee.

The initial well study showed that 34% of 320 wells tested in November — a relatively dry period — did not meet health standards for nitrates and total coliform, both of which can be found in manure but which can come from other sources as well.

Well testing in the county dating back to 2004 has produced similar results, although on average, the latest figures revealed a higher percentage of unsafe wells.

Between 2004 and 2015, 29% of 620 wells in a voluntary testing program by the Kewaunee County Land and Water Conservation Department showed unsafe drinking water.

The agriculture community has raised doubts about the results because owners of the wells volunteered to provide water

samples and may have already suspected they had a problem or live near livestock operations or fractured bedrock.

The latest study is different.

"This was a random study and it was done countywide," said Mark A. Borchardt, a microbiologist for the U.S. Department of Agriculture, an expert on pathogens in groundwater and the co-investigator of the project.

Critics of past well reports have blamed leaking septic systems as a possible explanation for wells, but Luft cited county data showing by the end of August 79% of all septic systems had been inspected and were compliant or were coming into compliance.

With so much manure being spread on the landscape, Luft said the results are a sign that manure is the likely source of the tainted wells.

The county's <u>total cattle population</u> is 98,000, which includes dairy cows. That's up 64% from 59,800 cattle in 1983, <u>according to state figures</u>. The number of dairy cows, which produce more manure than calves or heifers, is 45,500, according to the <u>U.S. Agriculture Department</u>.

But Borchardt said, "It's way too premature" to blame cattle.

Borchardt and his colleagues still must pinpoint the various depths of contamination in the groundwater.

The next phase of the study will be more telling, he said. In that, researchers will use DNA fingerprinting to identify whether bacteria in 20 wells comes from cattle or humans. Another phase will use an automated sampling system to monitor the flow of groundwater in real time to measure spikes in bacteria and viruses moving through the groundwater.

In April, <u>Kewaunee County voters</u> approved a <u>groundwater</u> <u>protection ordinance</u> prohibiting manure spreading from Jan. 1 to April 15 on land with 20 feet or less of soil before reaching bedrock.

"It's a step in the right direction," said John Pagel, owner of <u>Pagel's Ponderosa Dairy</u>, the largest dairy farm in Kewaunee County. "It's one more tool for farmers to use."

The state-funded study will also inject more science into the manure debate, said Pagel, who milks more than 4,000 cattle.

"It's additional information to help us understand how serious the problem is," he said.

For now, he said, he wants to see the complete results from the study before he draws any conclusions.